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(71) Applicants (*for all designated States except US*): **THE BOARD OF REGENTS OF THE UNIVERSITY AND COMMUNITY COLLEGE SYSTEM OF NEVADA** [US/US]; 2601 Enterprise Road, Reno, NE 89512 (US). **EAGLE-PICHER FILTRATION AND MINERALS, INC.** [US/US]; 9685 Gateway Drive, Suite 1000, Reno, Nevada 89511 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **MISRA, Manoranjan** [US/US]; 20 Scattergun Circle, Reno, NV 89509 (US). **LENZ, Peter** [US/US]; 8625 Spearhead Way, Reno, NV 89506 (US).

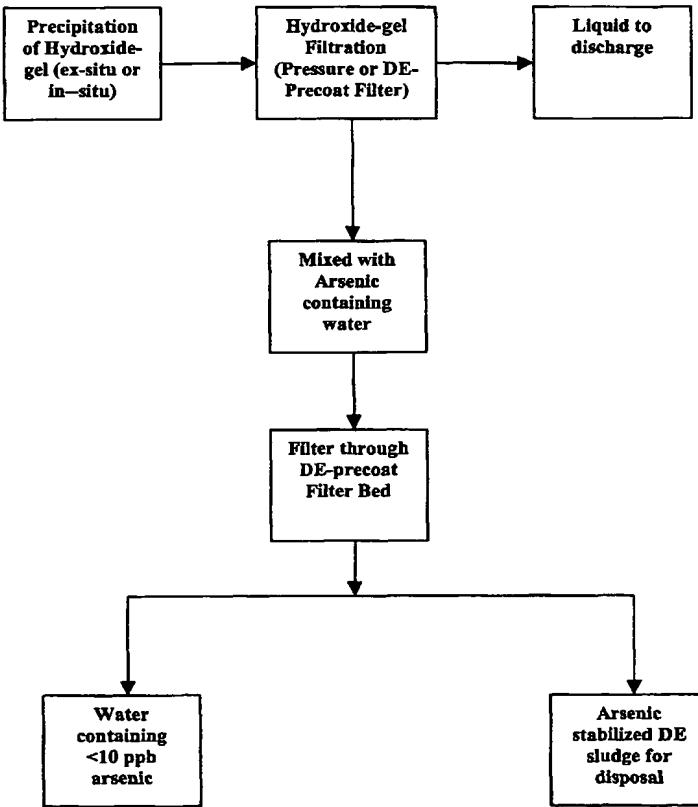
(74) Agents: **Doughty, Susan, K. et al.**; Greenlee, Winner and Sullivan, P.C., 5370 Manhattan Circle, Suite 201, Boulder, CO 80303 (US).

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(54) Title: REMOVAL OF ARSENIC FROM DRINKING AND PROCESS WATER



(57) Abstract: A method of removing arsenic and heavy metals from water using metal salt hydroxidegels is provided. The arsenic present in water is adsorbed onto the hydroxide-gels which can effectively be filtered through a diatomaceous earth (DE) filtration bed. The combination of DE mixed hydroxide-gels is also effective in removing arsenic from water and heavy metals from water.



Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/11010

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C02F 1/28
US CL : 210/667

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 210/667, 665, 681, 688, 705, 714, 716, 717, 724, 728, 777, 778, 911, 912; 252/175, 179; 502/405, 406

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
NONE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|----------------------------|
| Y | US 6,197,201 B1 (MISRA et al.) 06 March 2001, col. 4 line 4 through col. 6 line 42, and col. 11 lines 18-37 | 1-39 |
| Y | US 5,064,531 A (WANG et al.) 12 November 1991, col. 2 line 50 through col. 3 line 26 | 4-8, 24 |
| Y | US 5,683,953 A (MILLS) 04 November 1997, col. 4 line 56 through col. 8 line 28 | 6, 7, 10, 11, 15-26, 29-39 |
| Y | US 5,432,077 A (FARRAH) 11 July 1995, col. 3 line 52 through col. 5 line 48 | 27-39 |
| A | US 5,547,583 A (ALEXANDER) 20 August 1996 | |

Further documents are listed in the continuation of Box C.

See patent family annex.

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Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
Facsimile No. (703)305-3230

Authorized officer

Peter A. Hruskoci

Telephone No. 703-308-0661

Pat